

Global Tropics Hazards And Benefits Outlook

3/14/2017

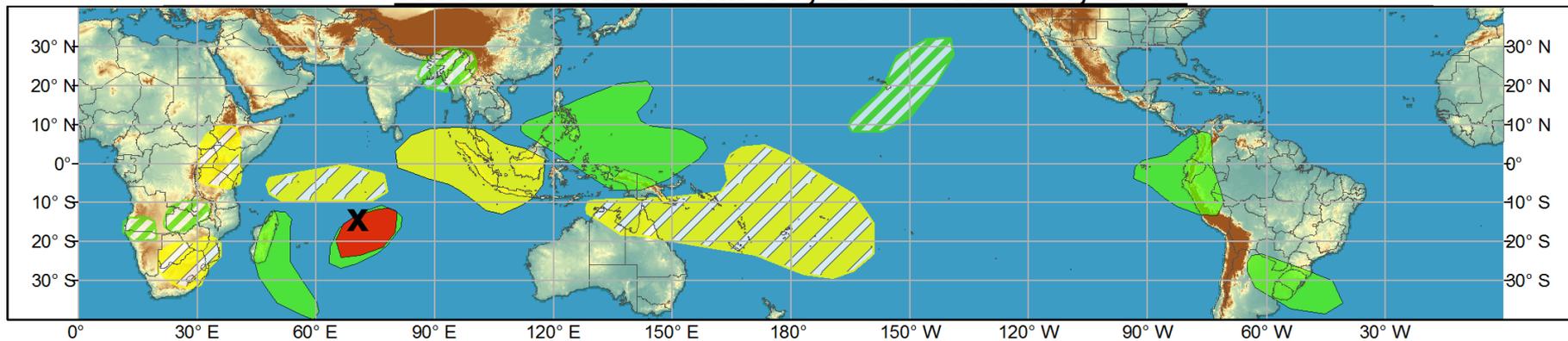
Adam Allgood

Outline

1. Review of Recent Conditions
2. Synopsis of Climate Modes
3. GTH Outlook and Forecast Discussion
4. Connections to U.S. Impacts

Outlook Review – Tropical Cyclones

Week 1 - Valid: Mar 08, 2017 - Mar 14, 2017

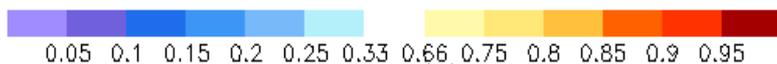
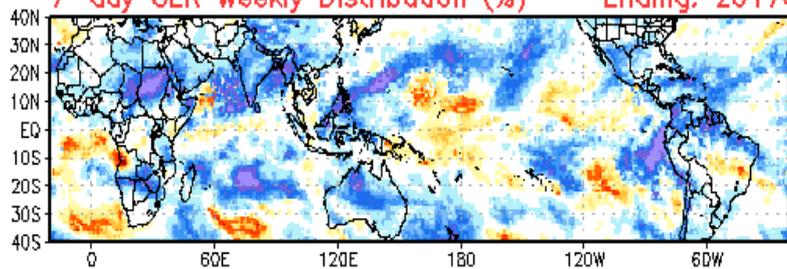


Week 2 - Valid: Mar 08, 2017 - Mar 14, 2017

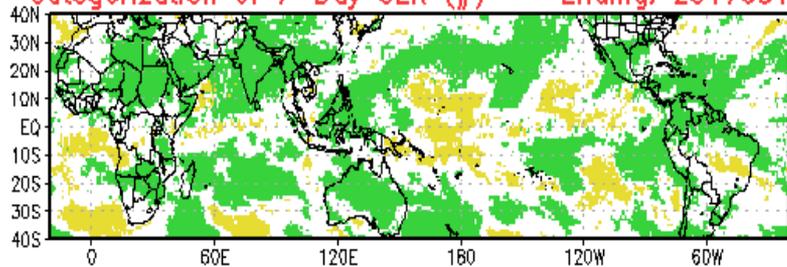


Tropical Storm Eleven – formed 8 March
Max sustained winds: 40kt

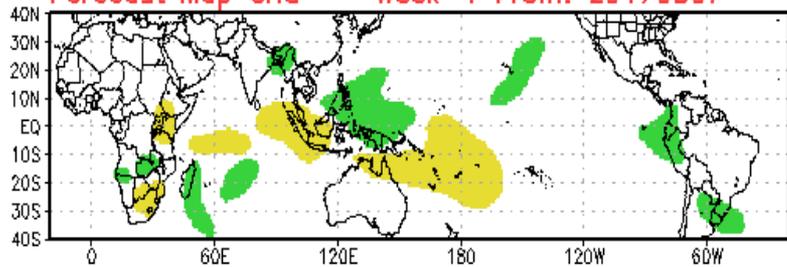
7-day OLR Weekly Distribution (%) -- Ending: 20170314



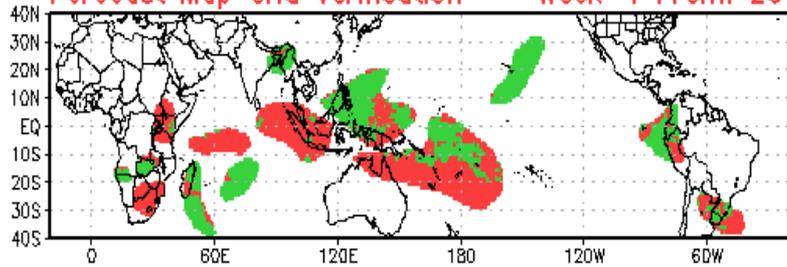
Categorization of 7-Day OLR (#) -- Ending: 20170314



Forecast Map Grid -- Week-1 From: 20170307

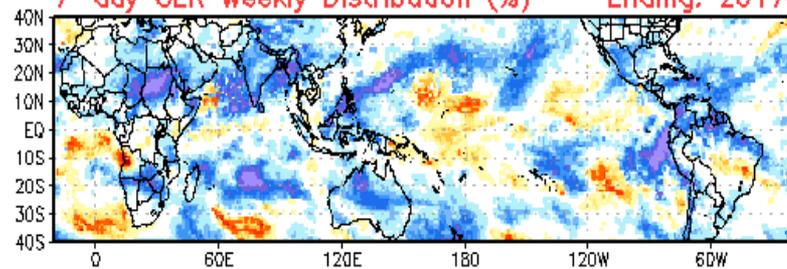


Forecast Map Grid Verification -- Week-1 From: 20170307

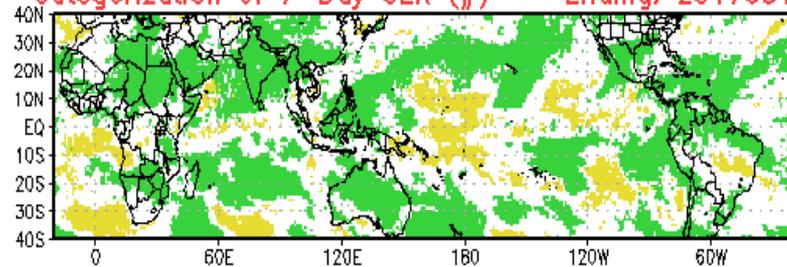


Hit: Green, Miss: Red
Heidke Skill Score: 18.0503

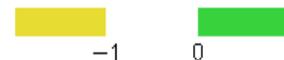
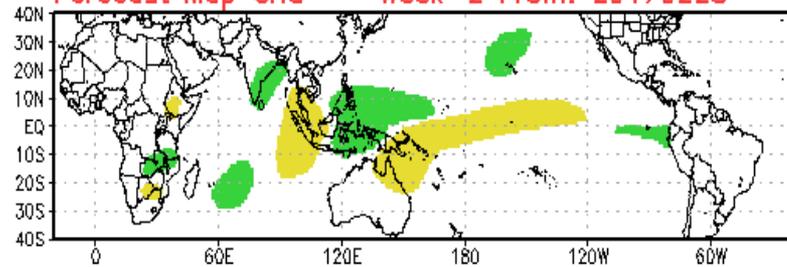
7-day OLR Weekly Distribution (%) -- Ending: 20170314



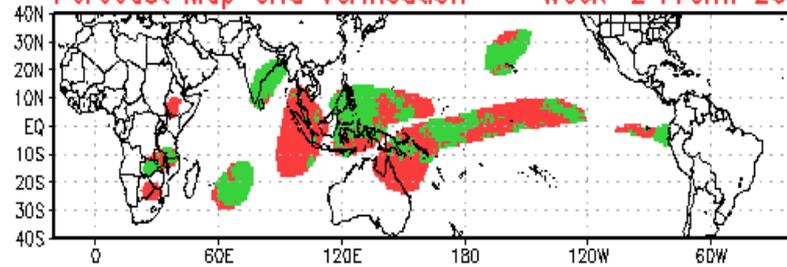
Categorization of 7-Day OLR (#) -- Ending: 20170314



Forecast Map Grid -- Week-2 From: 20170228



Forecast Map Grid Verification -- Week-2 From: 20170228



Hit: Green, Miss: Red
Heidke Skill Score: 18.7002

Synopsis of Climate Modes

ENSO:

- ENSO-neutral conditions are favored to continue through at least the Northern Hemisphere spring 2017, with increasing chances for El Niño development into the fall.

MJO and other subseasonal tropical variability:

- The MJO weakened during the past week
- Dynamical model MJO index forecasts generally depict a weak signal over the next two weeks.
- Rossby waves, the remnant low frequency state, and mid-latitudes influencing pattern.

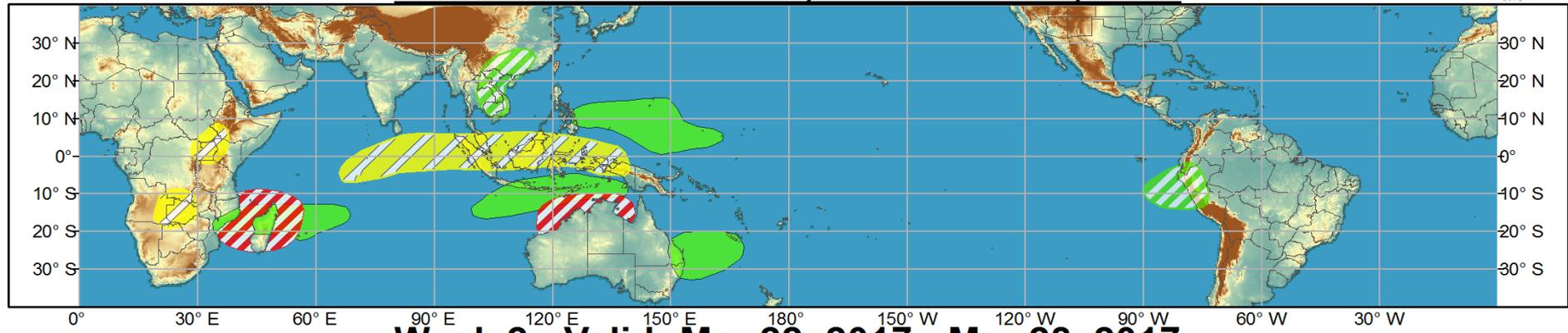
Extratropics:

- Due to the lack of a robust intraseasonal signal in the tropics, the effects of tropical forcing on the extratropics is uncertain.

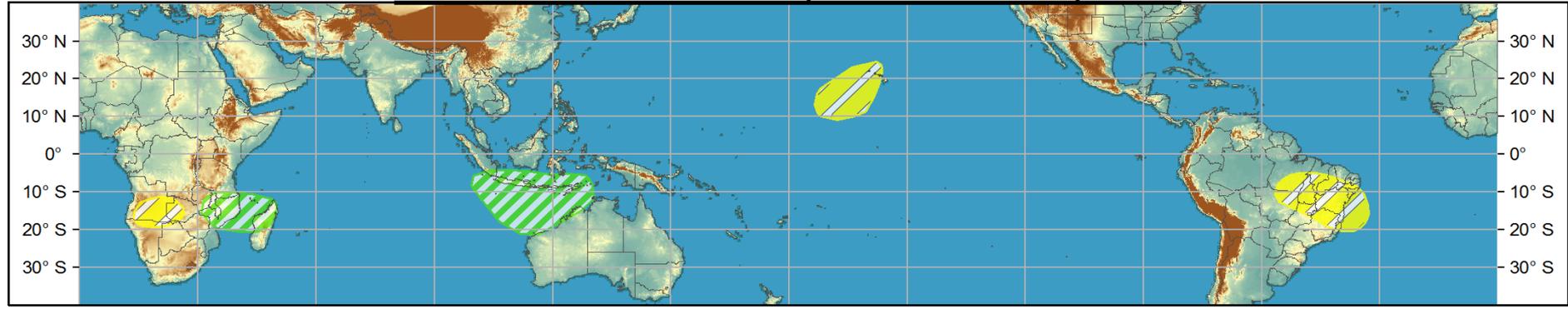


Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Mar 15, 2017 - Mar 21, 2017



Week 2 - Valid: Mar 22, 2017 - Mar 28, 2017



Confidence

High Moderate

- Tropical Cyclone Formation** Development of a tropical cyclone (tropical depression - TD, or greater strength).
- Above-average rainfall** Weekly total rainfall in the upper third of the historical range.
- Below-average rainfall** Weekly total rainfall in the lower third of the historical range.
- Above-normal temperatures** 7-day mean temperatures in the upper third of the historical range.
- Below-normal temperatures** 7-day mean temperatures in the lower third of the historical range.

Produced: 03/14/2017
Forecaster: Allgood

Product is updated once per week, except from 6/1 - 11/30 for the region from 120E to 0, 0 to 40N. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.



IR Satellite & 200-hpa Velocity Potential Anomalies

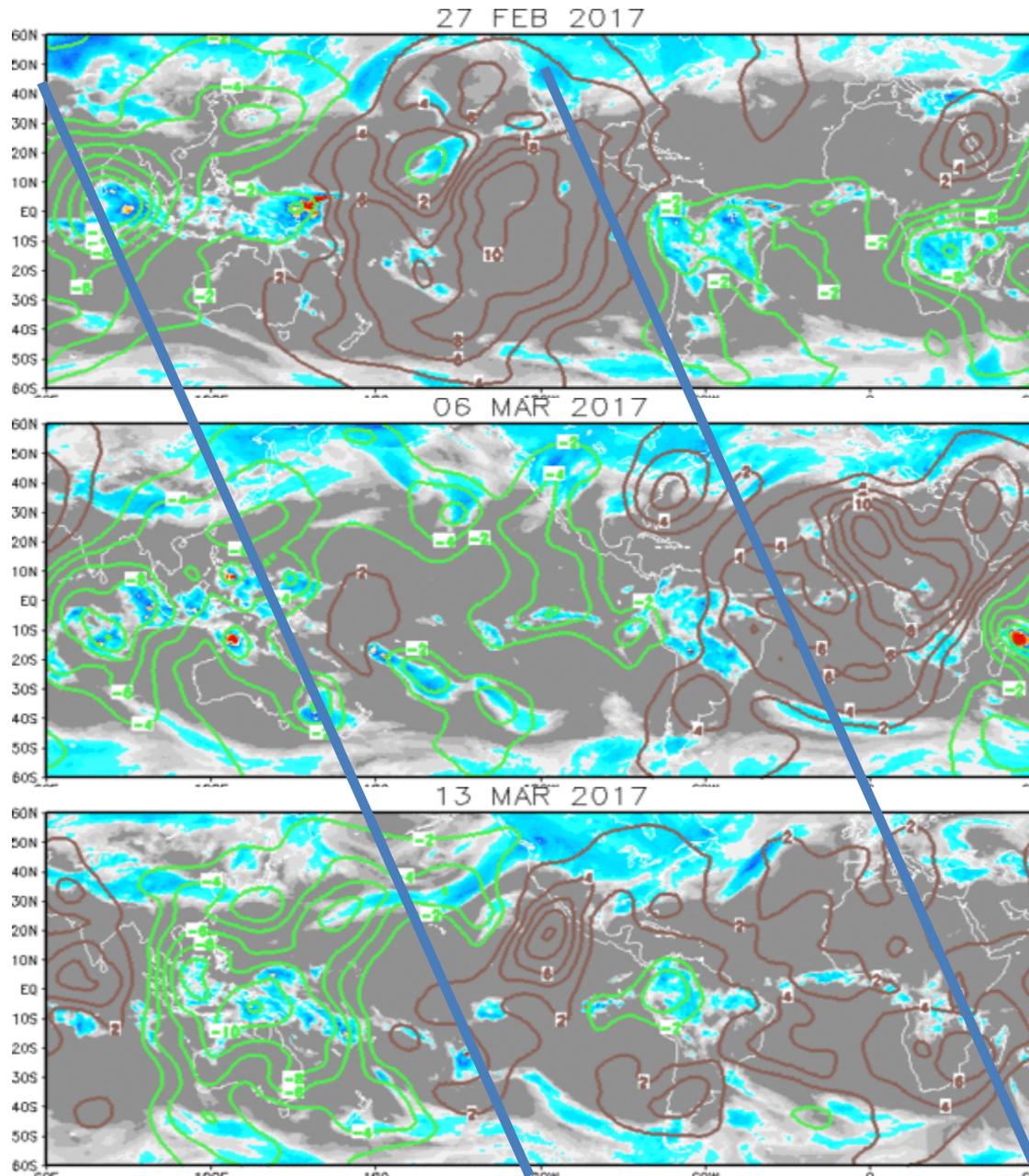
Green: Enhanced Divergence

Brown: Enhanced Convergence

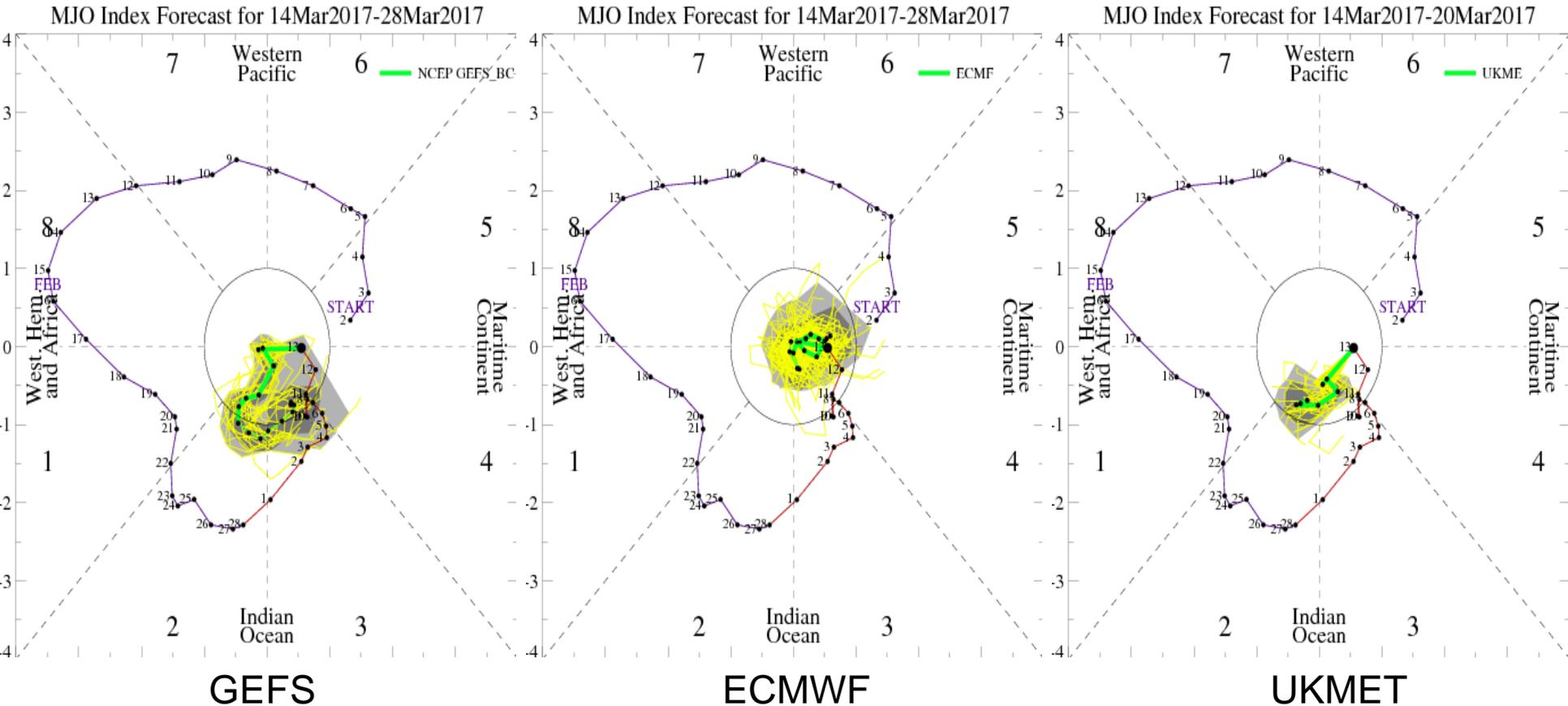
Wave-1 with enhanced phase emerging over the Indian Ocean.

Less coherent Wave-1 over Maritime Continent.
Westward moving features competing.

Semi-coherent structure remains, but zonal width of enhanced phase is very limited wrt canonical MJO signal.
Note low frequency enhanced signal over western South America



MJO Observation/Forecast

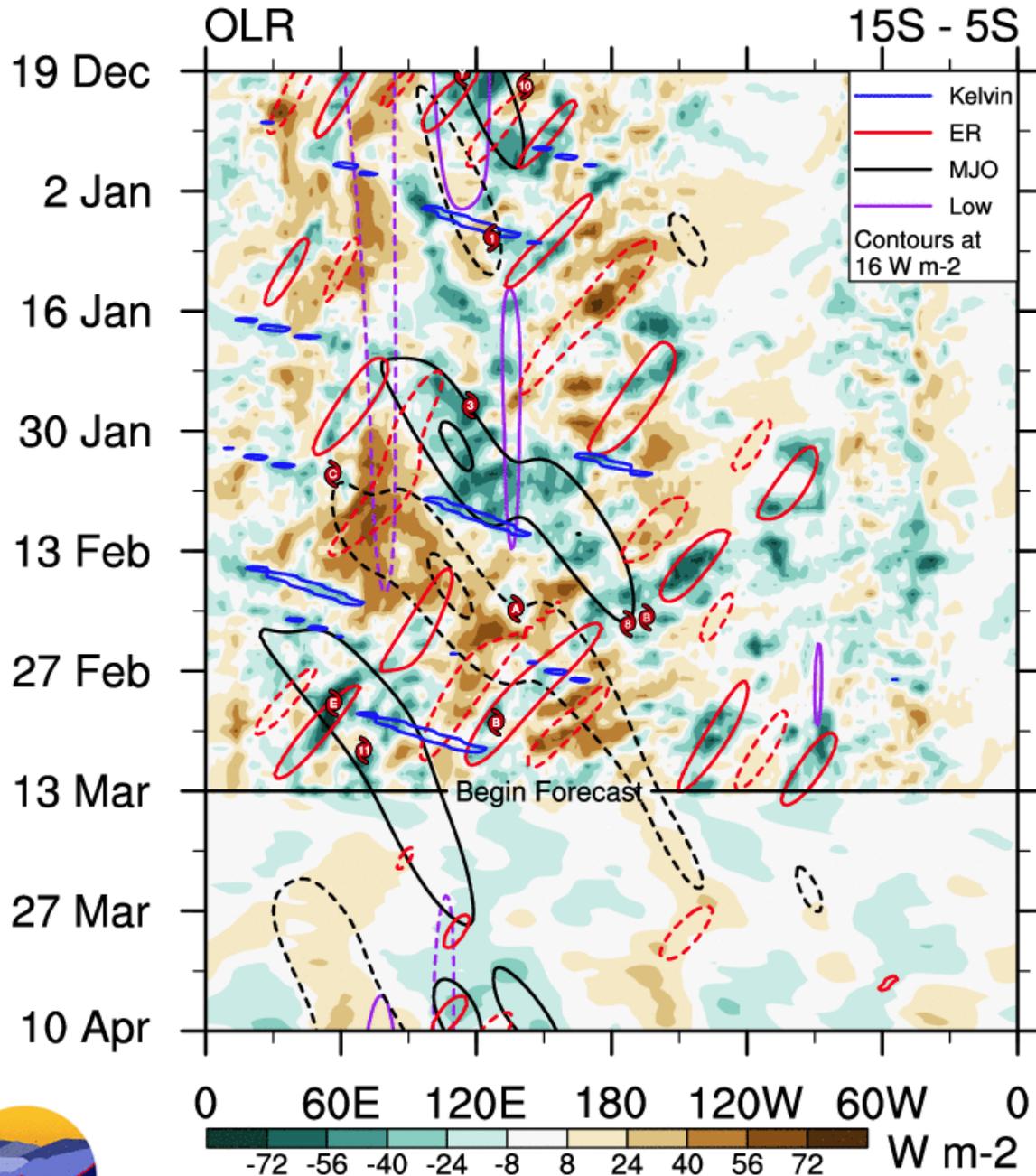


Wheeler-Hendon based analyses of model forecasts indicate a weak MJO signal during the next two weeks.

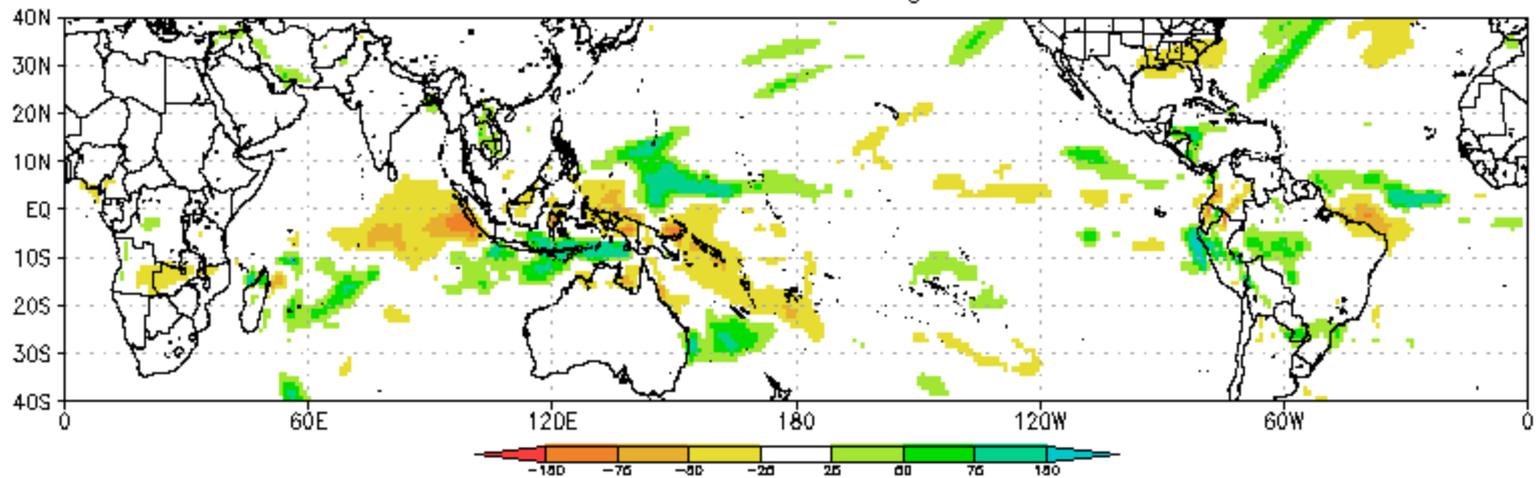
GEFS is a bit of an outlier showing a weak signal (scenario is unlikely)

Weakened MJO apparent in OLR field.

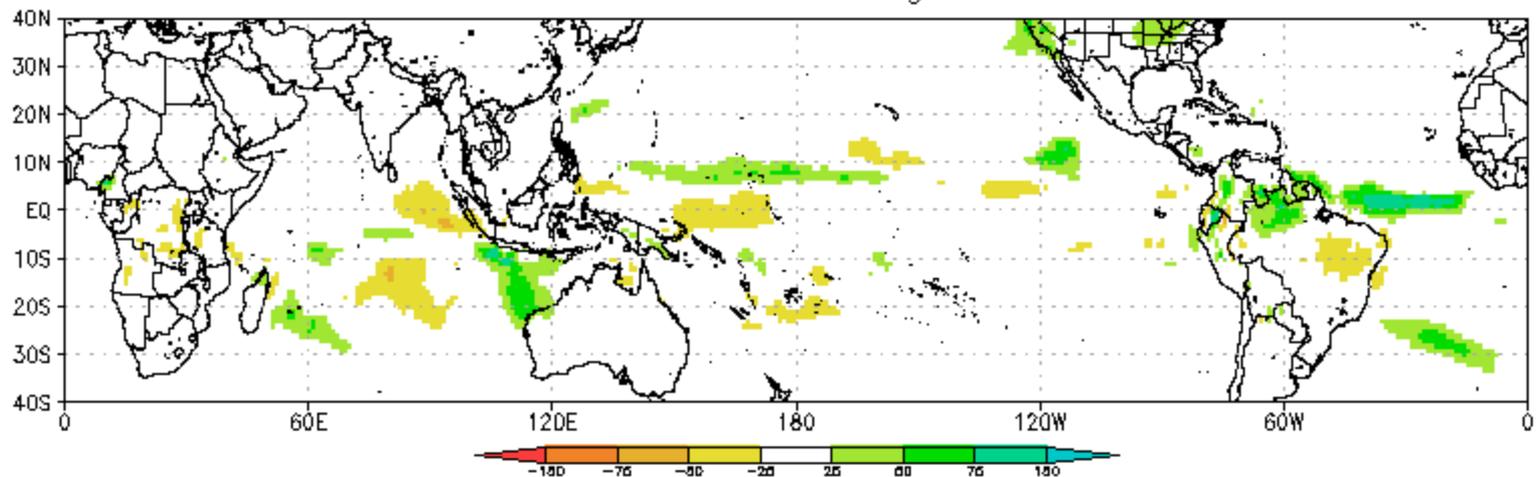
Rossby Wave interference, and also remnant low frequency state



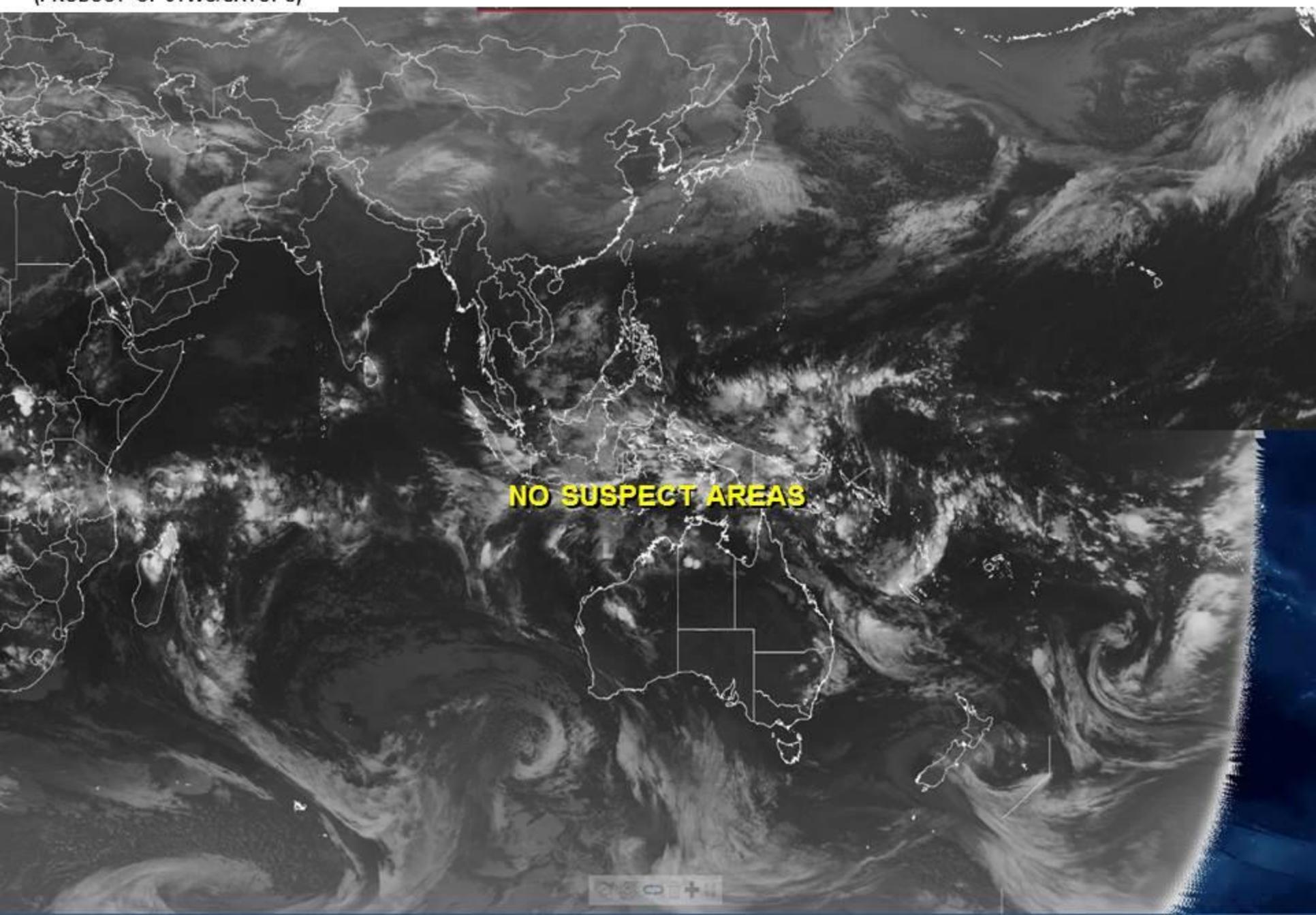
CFSv2 Precip Anomalies (mm) Issued 13Mar2017
Week-1 Forecast Ending 21Mar2017



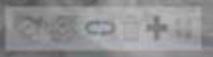
CFSv2 Precip Anomalies (mm) Issued 13Mar2017
Week-2 Forecast Ending 28Mar2017

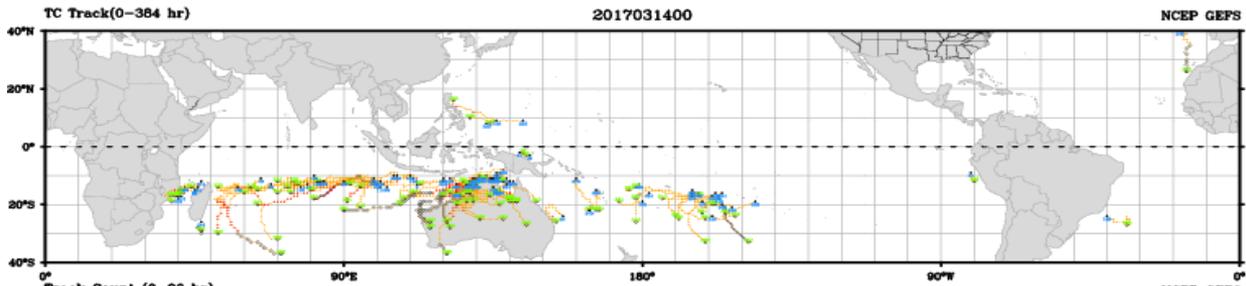


VALID TIME: 13/1800Z
(PRODUCT OF JTWC/SATOPS)

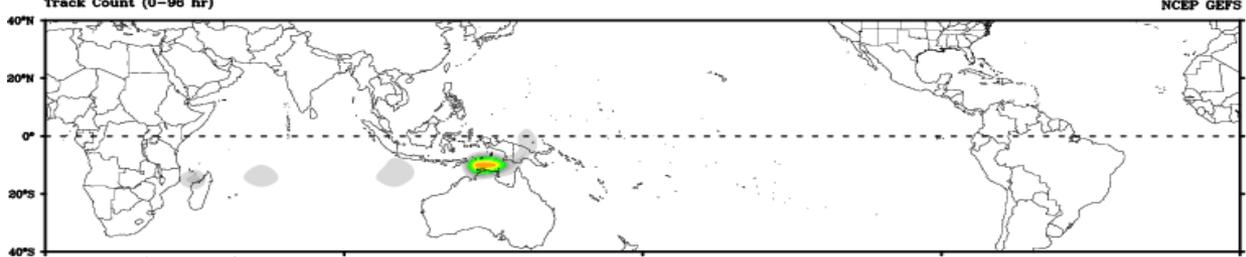


NO SUSPECT AREAS

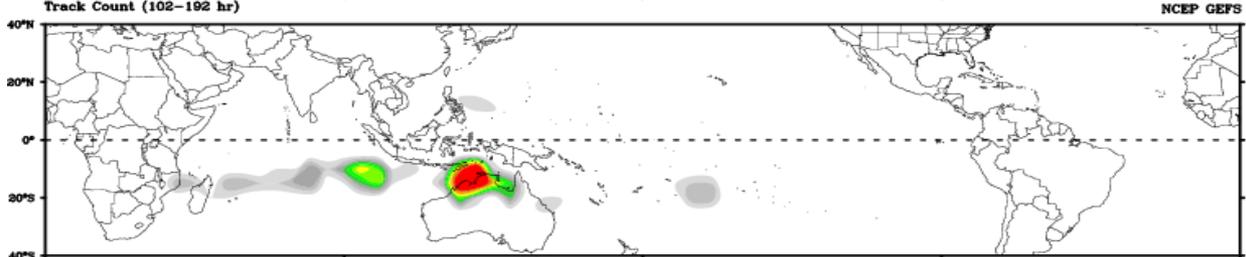




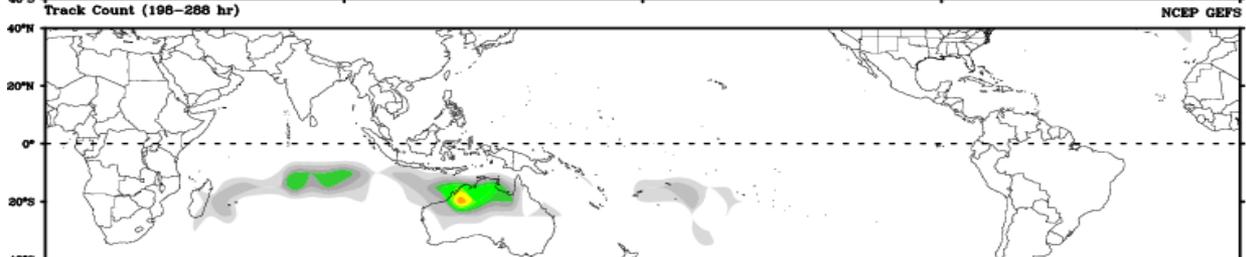
Days 1-4



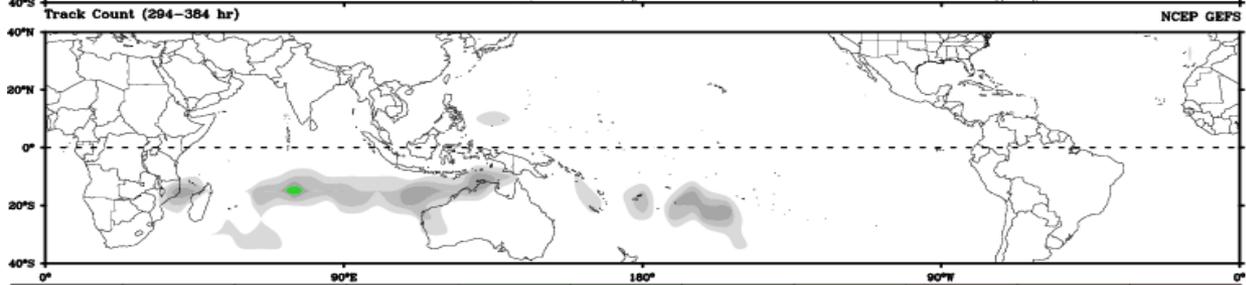
Day 5-8



Day 9-12

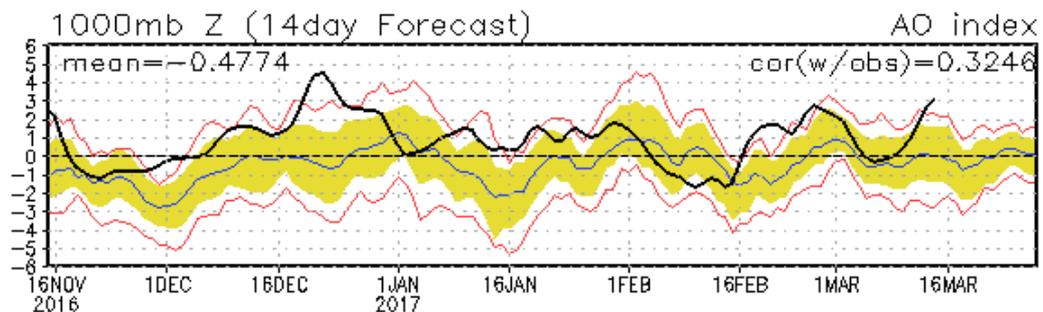
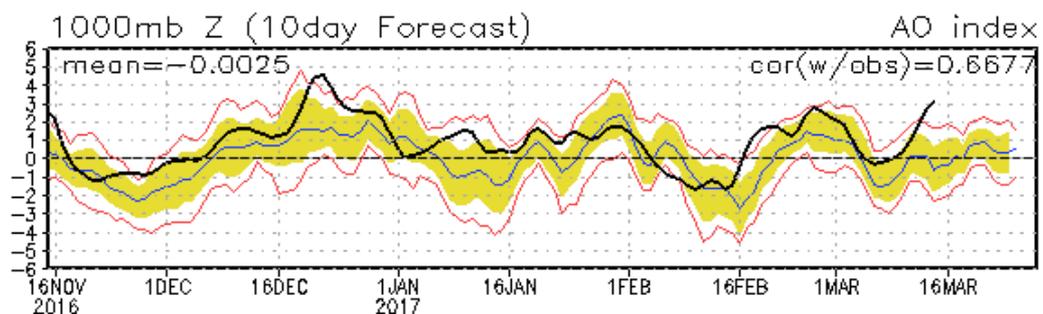
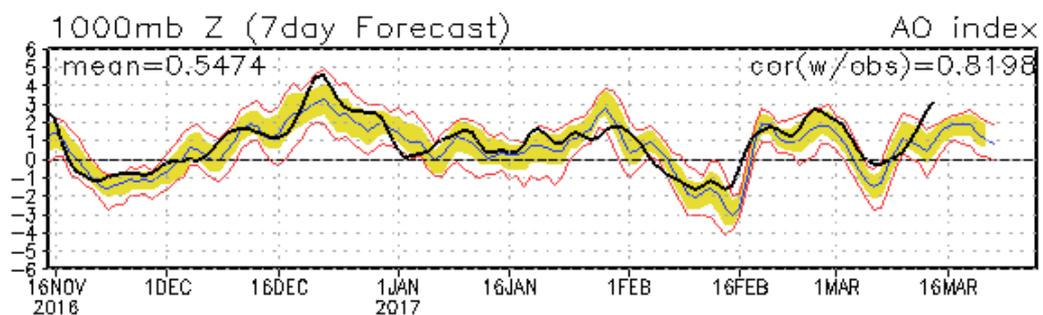
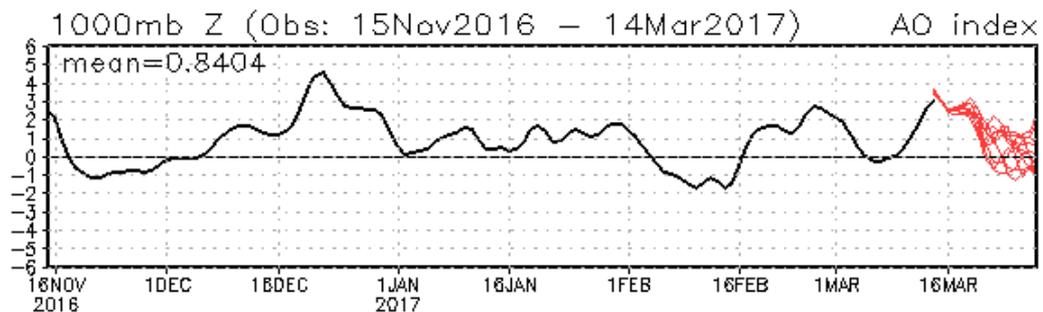


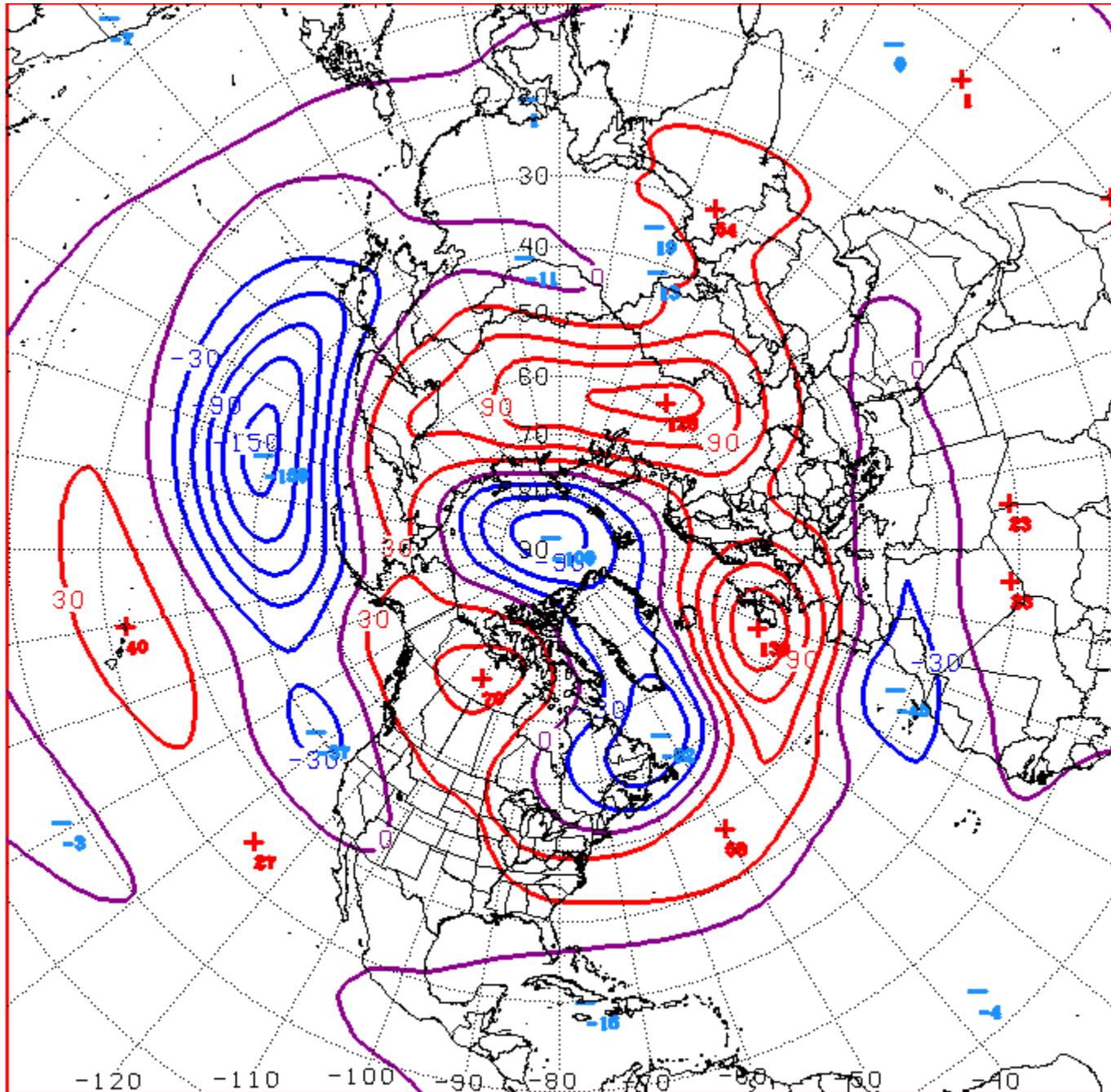
Day 13-15



Connections to U.S. Impacts

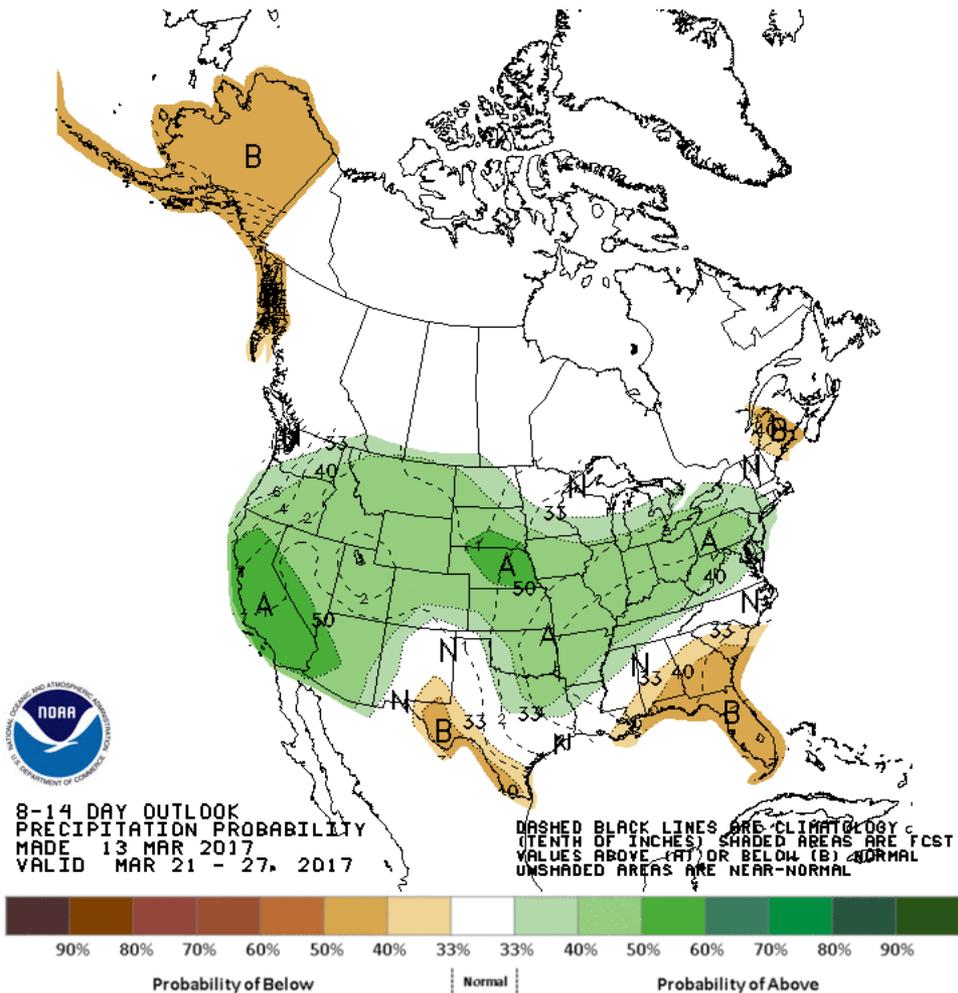
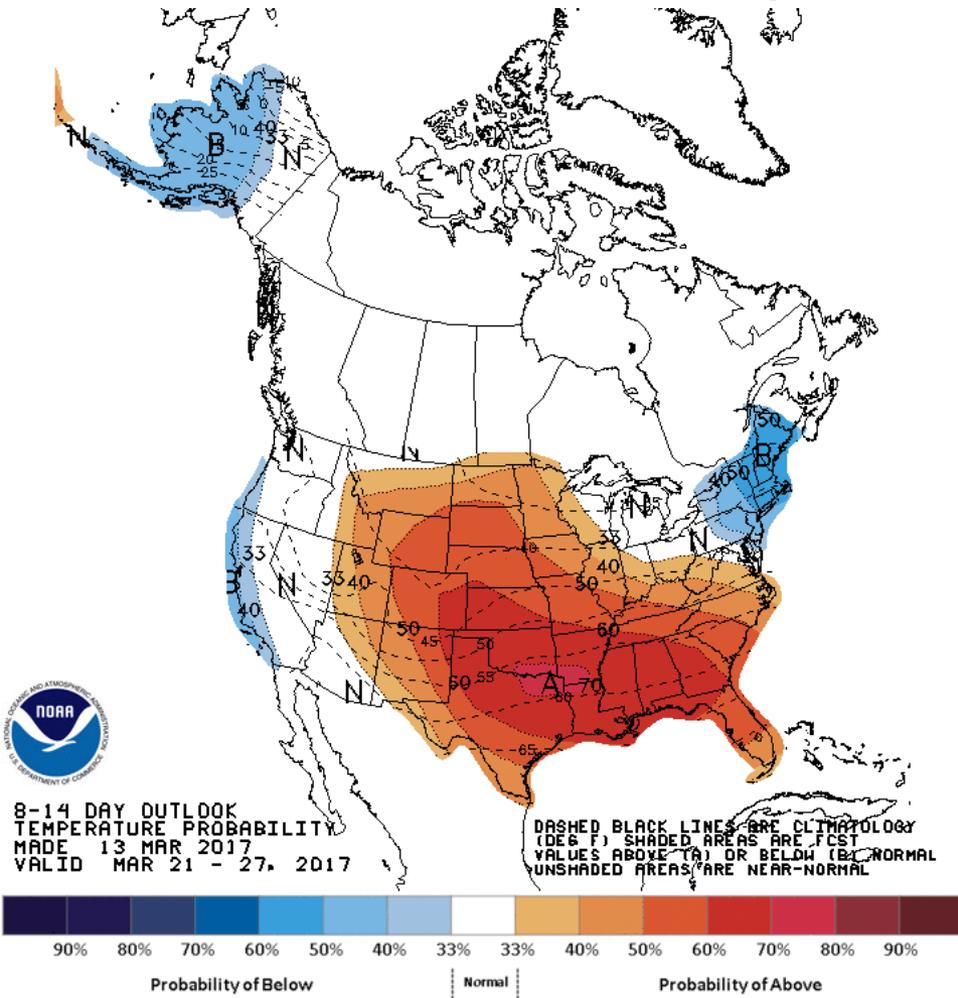
AO: Observed & ENSM forecasts





D+11 500 MB ANOMALIES FROM ALZ ENSM
 CPC MAP MADE MAR 14 2017 1351 UTC CNTD MAR 25 2017

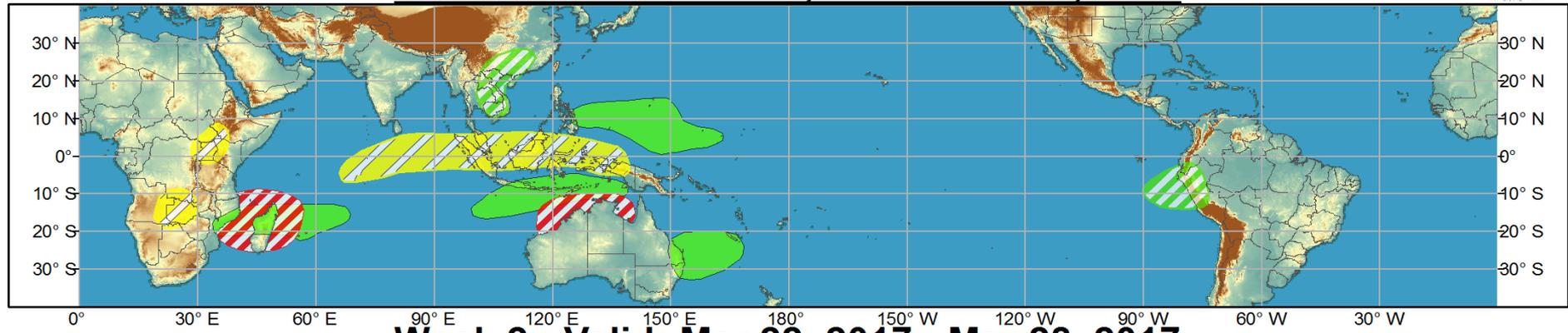
Week 2 – Temperature and Precipitation



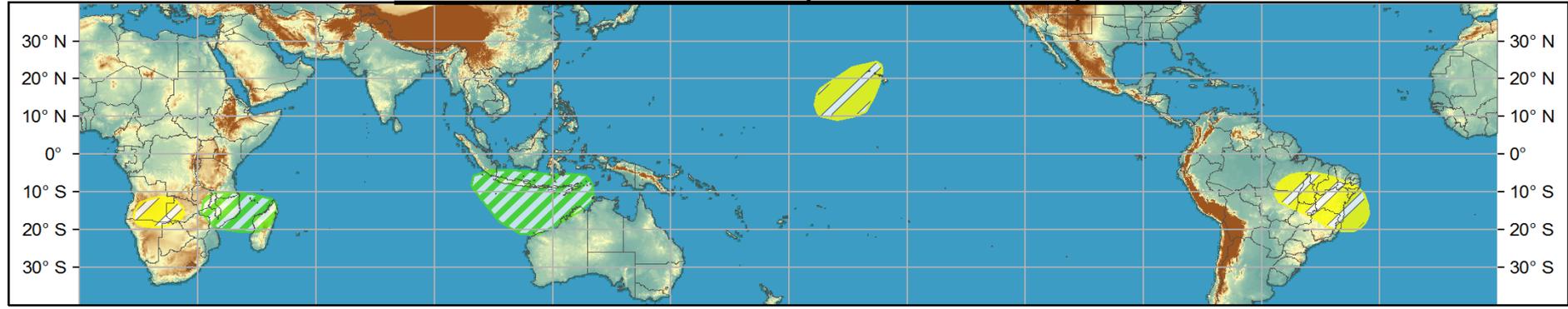


Global Tropics Hazards and Benefits Outlook - Climate Prediction Center

Week 1 - Valid: Mar 15, 2017 - Mar 21, 2017



Week 2 - Valid: Mar 22, 2017 - Mar 28, 2017



Confidence

High Moderate

- Tropical Cyclone Formation** Development of a tropical cyclone (tropical depression - TD, or greater strength).
- Above-average rainfall** Weekly total rainfall in the upper third of the historical range.
- Below-average rainfall** Weekly total rainfall in the lower third of the historical range.
- Above-normal temperatures** 7-day mean temperatures in the upper third of the historical range.
- Below-normal temperatures** 7-day mean temperatures in the lower third of the historical range.

Produced: 03/14/2017
Forecaster: Allgood

Product is updated once per week, except from 6/1 - 11/30 for the region from 120E to 0, 0 to 40N. The product targets broad scale conditions integrated over a 7-day period for US interests only. Consult your local responsible forecast agency.

